Northeastern University
**Khoury College of
Computer Sciences**

CS1100: Assignment 16 (Access Lab 5)

Creating and Querying Databases

To complete this assignment you must submit an electronic copy to BlackBoard by the due date. Download the starter database and save it under the name *CS1100.LastName.A16* and where *LastName* is your last name.

To download the files from Google Drive, click the download button -- do not open the files in Google.

Knowledge Needed

This lab requires the following Access techniques:

- Query Construction: follow Principle of Simplest Query (WASE (Widening, Aggregation, Selection, Elimination of Duplicates))
- Report Construction
- Report Construction Approach Hints

In this lab you are asked to construct two reports, one that will generate an inventory report for a given product when the user specifies a particular Product ID, and one that will generate a report about the orders placed by a given contact.

Report 1 (40 Points)

The first report is an inventory report. Your task is to create this exact report with the additional requirement that Access prompt for the Product ID so that you can create a report for any product. Your report must contain all of the above information on the particular product it represents. The report should show the current date on the bottom left (not the date that's on the sample report). The report must be based upon a query which selects out of the tables the information necessary for the report. As you can see from the above example, you will need

information about the product and information about where it was ordered and how many units were ordered. Note that the totals are not part of the query but instead are calculated using =SUM([*field*]) in the report.

Inventory Report

Product ID:	4		
Product Name:	Pentium II/450 MHz		
Units In Stock:	90		
Unit Price:	$2,299.00		

State	Number Sold	Sales
FL	4	$9,196.00
MA	1	$2,299.00
MN	1	$2,299.00
Total:	*6*	*$13,794.00*

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Again, the query must prompt the user for the Product ID of the product whose report is to be printed. This is a query with a parameter. When you have constructed and tested the query, save it as **Query01**. Following WASE, you might need subqueries which you name Query01a-Optional, Query01b-Optional, etc. Then design the report and test it, viewing its output on the screen. When the report does everything required of it, save it as **InventoryReport**. Product ID, Product Name, Units In Stock and Unit Price should be in the page header so that they are repeated on every page.

See this slide deck for some hints and more details.

Report 2 (60 Points)

Orders by Date

Customer:	C0006
	Jeffrey Muddell
	9522 S.W. 142 Street
	Tallahassee, FL, 33340

OrderDate	Order Number	Amount
4/18/1999		
	O0003	$4,183.95
4/25/1999		
	O0014	$109.85
4/26/1999		
	O0016	$259.90
5/1/1999		
	O0025	$757.90
	O0024	$1,223.92
	Total:	$6,535.52

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Suppose you are the owner of the computer store and want to see the orders by date for any given customer. This means that you want to see the order cost for each order that a contact has made grouped by date. Construct a report which will answer this question.

The pages of the report must be numbered and the title and headings must appear on each page.

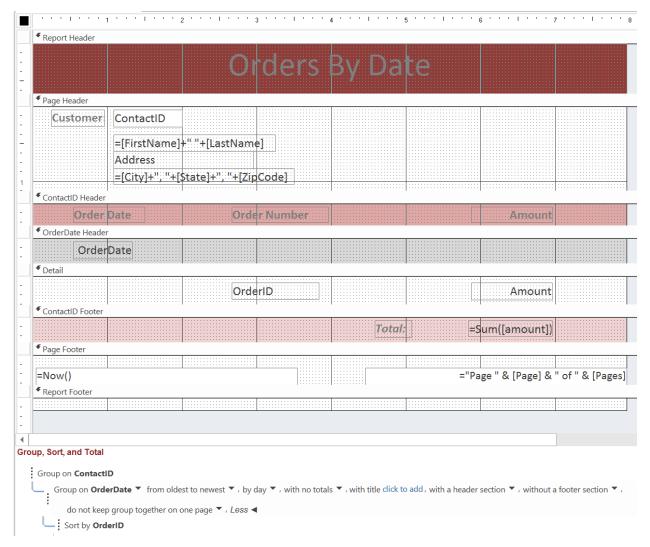The report should show the current date on the bottom left.

Your report must come from a query that will provide all required information. Name your query **Query02**, and save it as a part of the database. Following WASE, you might need subqueries which you name Query02a-Optional, Query02b-Optional, etc.

Save the report as **CustomerOrdersByDate**.

See this slide deck for some hints and more details. Here's a view of the report's design for reference:

Grading Rubric:

- -5 for every missing field or piece of required information
- -10 if quantities or totals are not correct
- -5 if it's not the current date
- -3 for every formatting issue
- -10 if address fields are not a single concatenated string
- -10 if queries are not parameterized